

Amendments to the specification:

Please replace paragraph [0054] with the following amended paragraph:

[0054] Although the example system1000-system 1000 depicts the conditioner control unit 1012 and the MMCF unit 1016 as being separate units that are communicatively coupled via the link 1018, the functions performed by the units 1012 and 1016 could be combined into a single device if desired. However, in some cases separation of the functions performed by the units 1012 and 1016 may be advantageous. For example, a separate MMCF unit 1016 may be easily retrofit to existing material conditioners and conditioner control units, thereby enabling expensive equipment having substantial useful life to realize the advantages of the apparatus and methods described herein.

Please replace paragraph [0099] with the following amended paragraph:

[0099] On the other hand, if the system 1000 determines at block 1708 that all of the zones are not substantially flat (i.e., at least one of the zones is not substantially flat), then the system 1000 determines if zone 1 is substantially flat (block 1710). If zone 1 is substantially flat, then control is passed to block 1812 of FIG. 18. At block 1812, a determination is made whether zone 3 is substantially flat. If zone 3 is substantially flat, then the system 1000 determines that zone 3 should be adjusted by an amount equal to the average deviation for zone 3 (block 1814) and control is returned to block 1408 (FIG. 14). On the other hand, if zone 3 is substantially flat (block 1812), then the system 1000 determines if zone 4 is flatter (e.g., has smaller I-units value and/or average deviation value) ~~flatter than~~ zone 5 (block 1816). If zone 4 is not flatter than zone 5 (block 1816), then the system 1000 determines that zone 4 is to be adjusted by the average deviation of zone 4 (block 1818) and control is returned to block 1408 (FIG. 14). If zone 4 is flatter than zone 5 (block 1816), then the system 1000 determines whether zone 4 is flatter than zone 3 (block 1820). If zone 4 is not flatter than zone 3 (block 1820), then the system 1000 determines that zone 5 is to be adjusted by the average deviation of zone 5 (block 1822) and control returns to block 1408 (FIG. 14). On the other hand, if zone 4 is flatter than zone 3, then the system 1000 determines that zone 3 is to be adjusted by the average amount of deviation of zone 3 (block 1824) and control is returned to block 1408 (FIG. 14).

Please replace paragraph [00102] with the following amended paragraph:

[00102] FIGS. 19-25 are more detailed flow diagrams depicting an example manner in which the adjust conditioner method (block 1408) of FIG. 14 may be implemented. In general, the example methods depicted in FIGS. 19-25 receive the zone change information from block 1408 1406 and generate appropriate adjustment commands, instructions and/or signals that cause the material conditioner 1002 (FIG. 10) to adjust its work rolls 1004 (FIG. 10) to achieve a desired material condition, which in this example is a substantially flat condition. In particular, zone change information includes the zone(s) to be changed and the amount of change required (e.g., the average deviation of a particular zone). The particular manner in which the zone change information is processed by the system 1000 is based on which zone(s) are to be changed. Thus, adjustments to zones 3, 1 and 4 only are carried out using the methods of FIG. 19, 20 and 21, respectively. Simultaneous adjustments to zones 1 and 5 are carried out using the method depicted in FIG. 22. Simultaneous adjustments to zones 1 and 2 are carried out using the method depicted in FIG. 23. Simultaneous adjustments to zones 1 and 3 are carried out using the method depicted in FIG. 24, and adjustments to zone 5 are carried out using the method shown in FIG. 25.